

QFS2010 Satellite Workshop:

"Cold gases meet many-body theory"

August 7th, 2010, Institut Laue-Langevin, Grenoble

Sponsored by CTPG and CNRS

9:20 **opening**

9:30 **W. Ketterle**

Characterizing many-body systems by observing density fluctuations

10:00 **M. Polini**

Spin Drag in an Ultracold Fermi Gas on the Verge of a Ferromagnetic Instability

10:30 **L. Salasnich**

Low-temperature thermodynamics of the unitary Fermi gas

11:00 **coffee break**

11:30 **E. Gorelik**

Néel transition of lattice fermions in a harmonic trap: a real-space DMFT study

12:00 **T. Roscilde**

Going beyond one-body coherence in atomic gases: how to observe pair / counter-flow superfluidity in one-dimensional bosonic mixtures

12:30 **lunch**

14:00 **A. Kuklov**

Quantum flexible quasi-molecular chains in optical lattice

14:30 **Y. Bunkov**

Cold gas of magnons, collective behaviour

15:00 **R. Zillich**

Strongly Interacting Dipolar Molecular Bose Gases

15:30 **coffee break**

16:00 **G. Guillon**

Quantum Monte Carlo Study of Rb^* , RB_2 , and other alkali in helium clusters

16:30 **G. Astrakharchik**

Monte Carlo study of quantum phase diagram of Rydberg atoms with repulsive $1/r^6$ interaction

17:00 **D. Ceperley**

How to find Hubbard model parameters for a disordered optical lattice

17:30 **closing remarks**